This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

What we claim is:

- 1. A polarized light source comprising:
 - a cholesteric liquid crystal polarizing device; and
- an unpolarized light source, said unpolarized light source being a member of the group consisting of an organic electroluminescent device and an organic photoluminescent device.
- 2. The polarized light source of claim 1, wherein said unpolarized light source is an organic electroluminescent device.
- 3. The polarized light source of claim 2, wherein said organic electroluminescent device comprises a cathode layer superposed with an organic electroluminescent material layer which is further superposed with an anode layer.
- 4. The polarized light source of claim 3, wherein said anode layer is an indium tin oxide layer.
- 5. The polarized light source of claim 1, wherein said unpolarized light source is an organic photoluminescent device.
- 6. The polarized light source of claim 5, wherein said organic photoluminescent device comprises a mirror superposed with an organic photoluminescent material layer.
- 7. The polarized light source of claim 3, wherein said organic electroluminescent device is superposed with said cholesteric liquid crystal polarizing device.
- 8. The polarized light source of claim 7, wherein said anode layer is disposed on said cholesteric liquid crystal polarizing device.
- 9. The polarized light source of claim 7, wherein said cholesteric liquid crystal polarizing device is disposed on a transparent substrate.

- 10. The polarized light source of claim 9, wherein said anode layer is indium tin oxide and said transparent substrate is glass.
- 11. The polarized light source of claim 3, wherein a transparent substrate is disposed between said organic electroluminescent device and said cholesteric liquid crystal polarizing device.
- 12. The polarized light source of claim 11, wherein said cholesteric liquid crystal polarizing device is disposed on another transparent substrate.
- 13. The polarized light source of claim 6, wherein said organic photoluminescent device is superposed with said cholesteric liquid crystal polarizing device.
- 14. The polarized light source of claim 13, wherein said photoluminescent material layer is disposed between said mirror and said cholesteric liquid crystal polarizing device.
- 15. The polarized light source of claim 14, wherein said cholesteric liquid crystal polarizing device is disposed on a transparent substrate.
- 16. The polarized light source of claim 6, wherein a transparent substrate is disposed between said organic photoluminescent device and said cholesteric liquid crystal polarizing device.
- 17. The polarized light source of claim 16, wherein said cholesteric liquid crystal polarizing device is disposed on another transparent substrate.
- 18. The polarized light source of claim 3, further comprising a microcavity from which microcavity resonance may be achieved, said microcavity having a microcavity length.
- 19. The polarized light source of claim 18, further comprising a birefringent retarder layer, said birefringent retarder layer being disposed in said microcavity.

- 20. The polarized light source of claim 19, wherein said birefringent retarder layer is disposed between said organic electroluminescent device and said cholesteric liquid crystal polarizing device.
- 21. The polarized light source of claim 20, wherein said microcavity length is the optical path-length from said cathode, through said organic electroluminescent material, said anode layer and said birefringent retarder layer, to said cholesteric liquid crystal polarizing device.
- 22. The polarized light source of claim 20, wherein said cholesteric liquid crystal polarizing device is disposed on a transparent substrate.
- 23. The polarized light source of claim 22, wherein said anode layer is indium tin oxide and said transparent substrate is glass.
- 24. The polarized light source of claim 6, further comprising a microcavity from which microcavity resonance may be achieved, said microcavity having a microcavity length.
- 25. The polarized light source of claim 24, further comprising a birefringent retarder layer, said birefringent retarder layer disposed in said microcavity.
- 26. The polarized light source of claim 25, wherein said birefringent retarder layer is disposed between said organic photoluminescent device and said cholesteric liquid crystal polarizing device.
- 27. The polarized light source of claim 26, wherein said microcavity length is the optical path-length from said cathode, through said organic photoluminescent material and said birefringent retarder layer, to said cholesteric liquid crystal polarizing device.

- 28. The polarized light source of claim 26, wherein said cholesteric liquid crystal polarizing device is disposed on a transparent substrate.
- 29. A polarized light source comprising a member of the group consisting of an organic electroluminescent device, said organic electroluminescent device including a mixture of a cholesteric liquid crystal material and an organic electroluminescent material, and an organic photoluminescent device, said photoluminescent device including a mixture of a cholesteric liquid crystal material and an organic photoluminescent material.
- 30. The polarized light source of claim 29, wherein said organic electroluminescent device further includes a cathode and an anode layer.
- 31. The polarized light source of claim 30, wherein said cholesteric liquid crystal material is further mixed with a conducting polymer, said conducting polymer being a member of the group comprising poly(para-phenylene vinylene); poly(N-vinyl-carbazole); 2-(4-biphenyl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole; 2,5-bis(5-tert-butyl-2-benzoxazolyl)thiophen; triphenyldiamine; tris-(8-hydroxyquinoline); mixtures thereof, and the like.
- 32. The polarized light source of claim 30, wherein said cholesteric liquid crystal material is bipolar.
- 33. The polarized light source of claim 30 wherein said cholesteric liquid crystal material has a constant pitch.
- 34. The polarized light source of claim 33, further comprising a cholesteric liquid crystal polarizing device superposed with said organic electroluminescent device.

- 35. The polarized light source of claim 33, wherein said anode layer is disposed on a transparent substrate.
- 36. The polarized light source of claim 35, wherein said anode layer is indium tin oxide and said transparent substrate is glass.
- 37. The polarized light source of claim 35, wherein said transparent substrate is disposed on a cholesteric liquid crystal polarizing device, said cholesteric liquid crystal polarizing device being disposed on another transparent substrate.
- 38. The polarized light source of claim 30, wherein said cholesteric liquid crystal material has a pitch distribution.
- 39. The polarized light source of claim 38, further comprising a broadband cholesteric liquid crystal polarizing device superposed with said organic electroluminescent device.
- 40. The polarized light source of claim 39, wherein said broadband cholesteric liquid crystal polarizing device is disposed between two transparent substrates, said anode layer being disposed on one of said transparent substrates.
- 41. The polarized light source of claim 29, wherein said organic photoluminescent device further comprises a mirror.
- 42. The polarized light source of claim 41 wherein said cholesteric liquid crystal material has a constant pitch.
- 43. The polarized light source of claim 42, further comprising a cholesteric liquid crystal polarizing device superposed with said organic photoluminescent device.
- 44. The polarized light source of claim 42, wherein said organic photoluminescent device is disposed on a transparent substrate.

- 45. The polarized light source of claim 44, wherein said transparent substrate is disposed on a cholesteric liquid crystal polarizing device, said cholesteric liquid crystal polarizing device being disposed on another transparent substrate.
- 46. The polarized light source of claim 41, wherein said cholesteric liquid crystal material has a pitch distribution.
- 47. The polarized light source of claim 46, further comprising a broadband cholesteric liquid crystal polarizing device superposed with said organic photoluminescent device.
- 48. The polarized light source of claim 47, wherein said broadband cholesteric liquid crystal polarizing device is disposed between two transparent substrates, said organic photoluminescent device being disposed between the said substrates.
- 49. A method for fabricating a polarized light source, said method comprising:
 - (a) providing an unpolarized light source selected from the group consisting of an organic electroluminescent device and an organic photoluminescent device; and
 - (b) superposing the unpolarized light source with a cholesteric liquid crystal polarizing device.
- 50. The method of claim 49, wherein said organic electroluminescent device includes a cathode, an organic electroluminescent material and an indium tin oxide anode layer.
- 51. The method of claim 49, wherein said organic photoluminescent device includes a mirror and an organic photoluminescent material.
- 52. The method of claim 49, said method further comprising:
- (c) providing a microcavity, said microcavity including a birefringent retarder disposed therein.

- 53. A method for fabricating a polarized light source, said method comprising:
 - (a) preparing a material mixture, said material mixture including a cholesteric liquid crystal material and a member of the group consisting of an organic electroluminescent material and an organic photoluminescent material; and
 - (b) incorporating said material mixture into a light source, said light source being a member of the group consisting of an organic electroluminescent device and an organic photoluminescent device.
- 54. The method of claim 53, wherein said cholesteric liquid crystal material has a constant pitch.
- 55. The method of claim 54, further comprising:
- (c) superposing said light source with a cholesteric liquid crystal polarizing device.
- 56. The method of claim 53, wherein said cholesteric liquid crystal material has a pitch distribution.
- 57. The method of claim 56, further comprising:
- (c) superposing said light source with a broadband cholesteric liquid crystal polarizing device.
- 58. A polarized light source comprising:

a cholesteric liquid crystal polarizing means; and

means for providing an unpolarized light source, said means for providing an unpolarized light source being a member of the group consisting of an organic electroluminescent device and an organic photoluminescent device.